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RAW SEQUENCE LISTING   DATE: 08/07/2002
PATENT APPLICATION: US/09/963,827B   TIME: 11:30:36

Input Set : A:\180-124-2 updated 05-03-02.ST25.txt
Output Set: N:\CRF3\08072002\I963827B.raw

```
 3 <110> APPLICANT: Duke University
 4        Sullenger, Bruce
 5        Rusconi, Christopher
 7 <120> TITLE OF INVENTION: RNA APTAMERS AND METHODS FOR IDENTIFYING THE SAME
 9 <130> FILE REFERENCE: 180/124/2
11 <140> CURRENT APPLICATION NUMBER: 09/963,827B
12 <141> CURRENT FILING DATE: 2001-09-26
14 <150> PRIOR APPLICATION NUMBER: 60/235,654
15 <151> PRIOR FILING DATE: 2000-09-26
17 <160> NUMBER OF SEQ ID NOS: 227
19 <170> SOFTWARE: PatentIn version 3.0
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22 <211> LENGTH: 96
23 <212> TYPE: RNA
24 <213> ORGANISM: Artificial
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29 <220> FEATURE:
30 <221> NAME/KEY: misc_feature
31 <222> LOCATION: (1)..(96)
32 <223> OTHER INFORMATION: RNA aptamer
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38 agcauaaccc agaggucgau aguacuggau cccccc                               96
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42 <211> LENGTH: 96
43 <212> TYPE: RNA
44 <213> ORGANISM: Artificial
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47 <223> OTHER INFORMATION: RNA aptamer
49 <220> FEATURE:
50 <221> NAME/KEY: misc_feature
51 <222> LOCATION: (1)..(96)
52 <223> OTHER INFORMATION: RNA aptamer
55 <400> SEQUENCE: 2
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58 cacauaaccc agaggucgau aguacuggau cccccc                               96
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62 <211> LENGTH: 96
63 <212> TYPE: RNA
64 <213> ORGANISM: Artificial
66 <220> FEATURE:
67 <223> OTHER INFORMATION: RNA aptamer
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C--> 24
C--> 44
C--> 64

RAW SEQUENCE LISTING   DATE: 08/07/2002
PATENT APPLICATION: US/09/963,827B   TIME: 11:30:36

Input Set : **A:\180-124-2 updated 05-03-02.ST25.txt**
Output Set: **N:\CRF3\08072002\I963827B.raw**

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W--> 70 <221> NAME/KEY: RNA aptamer
     71 <222> LOCATION: (1)..(96)
     72 <223> OTHER INFORMATION: RNA aptamer
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     78 cucauaaccc agaggucgau aguacuggau cccccc                               96
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     82 <211> LENGTH: 95
     83 <212> TYPE: RNA
C--> 84 <213> ORGANISM: Artificial
     86 <220> FEATURE:
     87 <223> OTHER INFORMATION: RNA aptamer
     89 <220> FEATURE:
     90 <221> NAME/KEY: misc_feature
     91 <222> LOCATION: (1)..(95)
     92 <223> OTHER INFORMATION: RNA aptamer
     95 <400> SEQUENCE: 4
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     98 gcauaaccca gaggucgaua guacuggauc ccccc                               95
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    103 <212> TYPE: RNA
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    106 <220> FEATURE:
    107 <223> OTHER INFORMATION: RNA aptamer
    109 <220> FEATURE:
    110 <221> NAME/KEY: misc_feature
    111 <222> LOCATION: (1)..(96)
    112 <223> OTHER INFORMATION: RNA aptamer
    115 <400> SEQUENCE: 5
    116 gggagagagg aagagggaug ggccuaccag uucguggcua gcgugacgua ccacccaggg    60
    118 accauaaccc agaggucgau aguacuggau cccccc                               96
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    122 <211> LENGTH: 96
    123 <212> TYPE: RNA
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    126 <220> FEATURE:
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    129 <220> FEATURE:
    130 <221> NAME/KEY: misc_feature
    131 <222> LOCATION: (1)..(96)
    132 <223> OTHER INFORMATION: RNA aptamer
    135 <400> SEQUENCE: 6
    136 gggagagagg aagagggaug ggcgauaacc aacaugguga ucccauucau cauacccuac    60
    138 aacauaaccc agaggucgau aguacuggau cccccc                               96
    141 <210> SEQ ID NO: 7
    142 <211> LENGTH: 96
    143 <212> TYPE: RNA
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RAW SEQUENCE LISTING   DATE: 08/07/2002
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Input Set : A:\180-124-2 updated 05-03-02.ST25.txt
Output Set: N:\CRF3\08072002\I963827B.raw

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     147 <223> OTHER INFORMATION: RNA aptamer
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     151 <222> LOCATION: (1)..(96)
     152 <223> OTHER INFORMATION: RNA aptamer
     155 <400> SEQUENCE: 7
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     158 cacauaaccc agaggucgau aguacuggau cccccc                             96
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     162 <211> LENGTH: 95
     163 <212> TYPE: RNA
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     166 <220> FEATURE:
     167 <223> OTHER INFORMATION: RNA aptamer
     169 <220> FEATURE:
     170 <221> NAME/KEY: misc_feature
     171 <222> LOCATION: (1)..(95)
     172 <223> OTHER INFORMATION: RNA aptamer
     175 <400> SEQUENCE: 8
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     178 ccauaacccca gaggucgaua guacuggauc ccccc                             95
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     182 <211> LENGTH: 96
     183 <212> TYPE: RNA
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     186 <220> FEATURE:
     187 <223> OTHER INFORMATION: RNA aptamer
     189 <220> FEATURE:
     190 <221> NAME/KEY: misc_feature
     191 <222> LOCATION: (1)..(96)
     192 <223> OTHER INFORMATION: RNA aptamer
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     198 gacauaaccc agaggucgau aguacuggau cccccc                             96
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     203 <212> TYPE: RNA
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     206 <220> FEATURE:
     207 <223> OTHER INFORMATION: RNA aptamer
     209 <220> FEATURE:
     210 <221> NAME/KEY: misc_feature
     211 <222> LOCATION: (1)..(96)
     212 <223> OTHER INFORMATION: RNA aptamer
     215 <400> SEQUENCE: 10
     216 gggagagagg aagagggaug ggcgauauac acaugguga ucccacccac augaaccac     60
     218 agcauaaccc agaggucgau aguacuggau cccccc                             96
```

RAW SEQUENCE LISTING   DATE: 08/07/2002
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Input Set : A:\180-124-2 updated 05-03-02.ST25.txt
Output Set: N:\CRF3\08072002\I963827B.raw

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     223 <212> TYPE: RNA
C--> 224 <213> ORGANISM: Artificial
     226 <220> FEATURE:
     227 <223> OTHER INFORMATION: RNA aptamer
     229 <220> FEATURE:
     230 <221> NAME/KEY: misc_feature
     231 <222> LOCATION: (54)..(56)
     232 <223> OTHER INFORMATION: n=c, u or a
     235 <220> FEATURE:
     236 <221> NAME/KEY: misc_feature
     237 <222> LOCATION: (1)..(96)
     238 <223> OTHER INFORMATION: RNA aptamer
     241 <400> SEQUENCE: 11
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     244 accauaaccc agaggucgau aguacuggau cccccc                              96
     247 <210> SEQ ID NO: 12
     248 <211> LENGTH: 95
     249 <212> TYPE: RNA
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     255 <220> FEATURE:
     256 <221> NAME/KEY: misc_feature
     257 <222> LOCATION: (1)..(95)
     258 <223> OTHER INFORMATION: RNA aptamer
     261 <400> SEQUENCE: 12
     262 gggagagagg aagagggaug gggacuauac gugaacgacu gcauccacuu ccccgccaug    60
     264 gcauaacccca gaggucgaua guacuggauc ccccc                             95
     267 <210> SEQ ID NO: 13
     268 <211> LENGTH: 96
     269 <212> TYPE: RNA
C--> 270 <213> ORGANISM: Artificial
     272 <220> FEATURE:
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     275 <220> FEATURE:
     276 <221> NAME/KEY: misc_feature
     277 <222> LOCATION: (1)..(96)
     278 <223> OTHER INFORMATION: RNA aptamer
     281 <400> SEQUENCE: 13
     282 gggagagagg aagagggaug ggccauacgu ggacgacugc acccgacccu ucagcccagg    60
     284 uccauaaccc agaggucgau aguacuggau cccccc                              96
     287 <210> SEQ ID NO: 14
     288 <211> LENGTH: 96
     289 <212> TYPE: RNA
C--> 290 <213> ORGANISM: Artificial
     292 <220> FEATURE:
     293 <223> OTHER INFORMATION: RNA aptamer
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RAW SEQUENCE LISTING   DATE: 08/07/2002
PATENT APPLICATION: **US/09/963,827B**   TIME: 11:30:36

Input Set : **A:\180-124-2 updated 05-03-02.ST25.txt**
Output Set: **N:\CRF3\08072002\I963827B.raw**

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        297 <222> LOCATION: (1)..(96)
        298 <223> OTHER INFORMATION: RNA aptamer
        301 <400> SEQUENCE: 14
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        304 accauaaccc agaggucgau aguacuggau cccccc                             96
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        308 <211> LENGTH: 96
        309 <212> TYPE: RNA
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        312 <220> FEATURE:
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        315 <220> FEATURE:
        316 <221> NAME/KEY: misc_feature
        317 <222> LOCATION: (54)..(54)
        318 <223> OTHER INFORMATION: n=c or u
        321 <220> FEATURE:
        322 <221> NAME/KEY: misc_feature
        323 <222> LOCATION: (1)..(96)
        324 <223> OTHER INFORMATION: RNA aptamer
        327 <400> SEQUENCE: 15
W-->    328 gggagagagg aagagggaug ggccauaacc acuugguga acccacccag cucnugugau    60
        330 ugcauaaccc agaggucgau aguacuggau cccccc                             96
        333 <210> SEQ ID NO: 16
        334 <211> LENGTH: 96
        335 <212> TYPE: RNA
C-->    336 <213> ORGANISM: Artificial
        338 <220> FEATURE:
        339 <223> OTHER INFORMATION: RNA aptamer
        341 <220> FEATURE:
        342 <221> NAME/KEY: misc_feature
        343 <222> LOCATION: (1)..(96)
        344 <223> OTHER INFORMATION: RNA aptamer
        347 <400> SEQUENCE: 16
        348 gggagagagg aagagggaug ggaccauaac gacuacucgu gaaucccacc aucagcgcac    60
        350 aacauaaccc agaggucgau aguacuggau cccccc                             96
        353 <210> SEQ ID NO: 17
        354 <211> LENGTH: 96
        355 <212> TYPE: RNA
C-->    356 <213> ORGANISM: Artificial
        358 <220> FEATURE:
        359 <223> OTHER INFORMATION: RNA aptamer
        361 <220> FEATURE:
        362 <221> NAME/KEY: misc_feature
        363 <222> LOCATION: (1)..(96)
        364 <223> OTHER INFORMATION: RNA aptamer
        367 <400> SEQUENCE: 17
        368 gggagagagg aagagggaug gggacuauac cggcaaucgu gcauccccug gaccuaacaa    60
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 08/07/2002
PATENT APPLICATION: US/09/963,827B   TIME: 11:30:37

Input Set : A:\180-124-2 updated 05-03-02.ST25.txt
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Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:11; N Pos. 54,56
Seq#:15; N Pos. 54
Seq#:25; N Pos. 46
Seq#:106; N Pos. 12,13
Seq#:120; N Pos. 1,11,21,38
Seq#:125; N Pos. 3,11,35
Seq#:134; N Pos. 9,19,24,29,36
Seq#:140; N Pos. 18,36,40,43

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51
Seq#:52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75
Seq#:76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99
Seq#:100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117
Seq#:118,119,120,121,122,123,124,125,126,127,128,129,130,131,132,133,134,135
Seq#:136,137,138,139,140,141,142,143,144,145,146,147,148,149,150,151,152,153
Seq#:154,155,156,157,158,159,160,161,162,163,164,165,166,167,168,169,170,171
Seq#:172,173,174,175,176,177,178,179,180,181,182,183,184,185,186,187,188,189
Seq#:190,191,192,193,194,195,196,197,198,199,200,201,202,203,204,205,206,207
Seq#:208,209,210,211,212,213,214,215,216,217,218,219,220,221,222,223,224,225
Seq#:226,227

VERIFICATION SUMMARY   DATE: 08/07/2002
PATENT APPLICATION: **US/09/963,827B**   TIME: 11:30:37

Input Set : **A:\180-124-2 updated 05-03-02.ST25.txt**
Output Set: **N:\CRF3\08072002\I963827B.raw**

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L:24  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:1
L:44  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:2
L:64  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:70  M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:84  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:104 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:124 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:144 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:164 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:184 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:204 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:224 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:250 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:270 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:290 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:310 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:328 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:336 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:356 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:376 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
L:396 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:19
L:416 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
L:436 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:21
L:456 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:22
L:476 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:23
L:496 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
L:516 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:25
L:534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:542 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:26
L:562 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:27
L:582 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:28
L:602 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:29
L:622 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:30
L:642 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:31
L:662 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:32
L:682 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:33
L:702 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:34
L:722 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:35
L:742 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:36
L:762 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:37
L:782 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:38
L:802 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:39
L:822 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:40
L:842 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:41
L:862 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:42
L:882 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:43
L:902 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:44
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VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/963,827B**

DATE: 08/07/2002
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Input Set : **A:\180-124-2 updated 05-03-02.ST25.txt**
Output Set: **N:\CRF3\08072002\I963827B.raw**

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L:942  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:46
L:962  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:47
L:982  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:48
L:1000 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:49
L:1018 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:50
L:1567 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:80
L:2041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:0
L:2299 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:120 after pos.:0
L:2395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125 after pos.:0
L:2563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:0
L:2677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:140 after pos.:0
```